

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOS V. F. DANIELS

Appeal No. 96-0001
Application No. 08/034,532¹

HEARD: MAY 5, 1999

Before CAROFF, METZ and HANLON, Administrative Patent Judges.

METZ, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's refusal to allow claims 9, 10 and 12-16, all the claims remaining in the application.

THE INVENTION

¹ Application for patent filed March 19, 1993. According to appellant, this application is a continuation of Application 07/711,636 filed June 6, 1991, now Patent No. 5,219,618 issued June 15, 1993.

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In the manufacture of coated paper, a coating composition is applied to the surface of a paper web by means of a premetering device for the purpose of improving one or more properties of the paper. To provide a uniform thickness of the coating composition on a paper web a doctor or so-called doctor blade is utilized to spread an even and uniform layer of the coating composition on the paper web. It is known in the art that because of numerous, well-known variables in the paper making process a build up is formed on the so-called "dry" side of the doctor or doctor blade. This build up is known in the art as stalagmite formation.

Appellant alleges to have discovered an apparatus and method of using the apparatus which overcomes the prior art problem of stalagmite formation. Appellant's process which is couched in terms of a Jepson-type claim comprises preventing stalagmite formation on the dry or down stream side of the doctor or doctor blade by supplying a fluid such as water to the dry side of the doctor blade. Appellant's invention also embraces apparatus for performing the above noted process.

Claim 15, an independent claim directed to appellant's improved process, and claim 16, an independent claim directed

to appellant's apparatus, are reproduced below for a more facile understanding of appellant's invention.

15. In an operation wherein a moving coated web moves along in contact with a doctor to smooth the coating on said paper web, the improvement which comprises positioning said doctor along the width of and in contact with the exposed surface of the coating on said moving web and directing a spray of aqueous liquid toward and along the line of contact of said doctor with the coated side of said moving coated paper web as said moving coated paper web moves along in contact with said doctor, the spray of aqueous liquid being directed toward and along said line of contact from a direction which is downstream of said doctor in the direction of motion of said moving coated paper web, to inhibit stalagmite formation of said coating on the downstream side edge of said doctor along said line of contact of said doctor with said moving coated paper web.

16. Apparatus comprising means for moving a paper web, means for coating said moving paper web, a doctor positioned along the width of said moving coated paper web to smooth the coating on said moving coated paper web and means for directing a spray of aqueous liquid toward and along the line of contact of said doctor at said moving coated paper web from a direction downstream of said doctor in the direction of motion of said moving coated paper web as said coated paper web moves in contact with said doctor.

THE REFERENCES

In addition to relying on what examiner has characterized as "the admitted state of the prior art", the examiner has relied on the following reference of record as evidence of obviousness.

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Eolkin 3,166,464 Jan. 19,
1965

OPINION

At page 4 of her answer, the examiner has characterized the "admitted state of the prior art" as representing appellant's disclosure at pages 2-4 of his specification. However, the disclosure at page 2-4 of appellant's specification is little more than recognition in the art that the problem of so-called stalagmite formation is indeed well known in the paper-making industry.

Eolkin is directed to drum drying apparatus and to an improvement in the method of drum drying slurried materials. (See column 1, lines 9-13). In the art of drum drying materials such as food slurries, Eolkin recognizes a problem has existed in relation to the build up from parts of the dried coating on the doctor blades (See column 1, lines 21-27). The build up of dry material occurs on the rear side of the doctor blade on the side opposite to the cutting edge of the doctor blade and adjacent to the drum drier. When the accumulation on the rear side of the doctor blade increases to

the maximum that may adhere to the blade, the excess falls off in small pieces onto the drum surface as it rotates. These small pieces are subsequently carried by the rotating drum and are recombined with fresh material to be applied to the surface of the drum. The finished product containing such recombined particles is unacceptable in appearance and, in the case of food stuffs, has an undesirable flavor.

The problem with deposit formation on the doctor blades of Eolkin was resolved by spraying water on the rear side of the doctor blade adjacent to the drum where build up of particles occurs. Water spray prevents build up on the back side of the doctor blade and appears to keep the drum surface clean (See column 1, lines 58-68). The apparatus used to supply the water supply comprises a water header disposed longitudinally and coextensive with the drying drums adjacent the doctor blades. The header assembly comprises a plurality of spaced apart spray nozzles in fluid communication with the headers and positioned to direct a water spray on the side opposite the cutting edge of the doctor blade (See column 2, lines 3-10). In Figure 1, the spraying nozzles **24**, and **25** are positioned to spray downwardly towards the back sides of the

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doctor blades **15**, and **16** so that a water spray impinges on the rear side of the doctor blade. The downward spray of the water is opposite the direction of rotation of the heating drum. The spray of water so applied removes undesirable buildup on the back side of the doctor blade (See column 2, lines 38-53).

In our opinion, the examiner has failed to make out a *prima facie* case of obviousness. Assuming *arguendo*, that Eolkin is not non-analogous art, both claims 15 to the method and 16 to the apparatus require directing a spray of aqueous liquid toward and along the line of contact of the doctor with the coated side of the moving coated paper web such that the direction of the spray is toward and in the direction of motion with the moving coated paper web. It is apparent from inspection of the Eolkin reference that the spraying of water on the back of the doctor blade is in a direction opposite to the direction of the rotation of the drying drum and, hence, opposite the film adhering to the drying drum. The examiner has failed to

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provide a reference which would have provided motivation to the ordinarily skilled routineer to have modified Eolkin's spraying apparatus and method as required by the claimed invention before us.

We cannot subscribe to appellant's argument that the Eolkin reference is so-called "non analogous" prior art. Whether or not a reference may be considered to be from a "non analogous" prior art is a question of fact. We are not convinced that the problem dealt with in Eolkin, that is, the formation of undesirable buildup on the back of a doctor blade is irrelevant to the question which confronted appellant here. While Eolkin does direct the spray from a direction downstream of the doctor as required by appellant's claims, the spray in Eolkin is not in the direction of motion of the moving coating on the drum in Eolkin as required by appellant's claims.

Contrary to the examiner's representation from page 4 of her answer, the aqueous spray in Eolkin is not in the direction of motion of the drum. Rather, the aqueous spray in Eolkin is in the direction opposite to the direction of travel of the drum. Thus, the examiner's conclusion from page 11 of her answer that "all of the

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features of the claimed invention are taught or suggested by the combination of the references to Eolkin and the admitted state of the prior art, as discussed in the 'Grounds for Rejection' above" lacks any factual basis in Eolkin or the "admitted state of the art".

OTHER ISSUES

In Paper No. 14, mailed on October 31, 1995, this application was remanded to the examiner for consideration of a terminal disclaimer filed in response to an obviousness-type double patenting rejection proffered by the examiner. In Paper No. 16, mailed February 6, 1996, the examiner acknowledged the terminal disclaimer and, accepted the same as overcoming the obviousness-type double patenting rejection. Accordingly, the question of obviousness-type double patenting is not before this panel.

In claim 15, we note that in line 2 of said claim the phrase "said paper web" lacks antecedent support in the body of the claim. Claim 15 broadly recites "a moving coated web" not a paper web. We also observe that in appellant's apparatus claims, certain elements are claimed in terms of the so-called

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"means plus function" language provided for by paragraph 6 of 35 U.S.C.

§ 112. In accordance with now well-accepted claim construction, the elements described in terms of "means plus function" are construed to cover only the specific corresponding structure described in the specification and the equivalents thereof.

On page 7 of appellant's specification, U.S. Patent No. 3,152,918 issued to Kraus is noted and discussed. While appellant's discussion of Kraus appears to suggest that the disclosure therein may be relevant to the herein claimed invention, appellant appears to dismiss Kraus as not suggesting the claimed invention because Kraus allegedly does not deal with "high solids content" coating compositions. Nevertheless, we observe that Kraus is directed to coating compositions having a solids content of "about 59%" (See column 2, lines 70-72 of Kraus). Because none of the claims before us recite any limitation as to the solids content of the coating composition applied to the paper web we recommend that the examiner and

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appellant reconsider the relevance of Kraus *vis-à-vis* the
patentability of the appealed claims under both 35 U.S.C. §§
102 and 103.

SUMMARY

The rejection of claims 9, 10 and 12-16 as being
unpatentable under 35 U.S.C. § 103 from the "admitted state of
the prior art" considered in view of Eolkin is reversed.

REVERSED

MARC L. CAROFF)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
ANDREW H. METZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
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ADRIENE L. HANLON)	
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APJ METZ

APJ HANLON

APJ CAROFF

REVERSED

Prepared: July 10, 2002